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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
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10/540,883

06/27/2005

Hiroshi Otsuka

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03/21/2007

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.

1940 DUKE STREET

ALEXANDRIA, VA 22314

EXAMINER

KARLS, SHAY LYNN

ART UNIT

PAPER NUMBER

1744

| SHORTENED STATUTORY PERIOD OF RESPONSE | NOTIFICATION DATE | DELIVERY MODE |
|--|-------------------|---------------|
|--|-------------------|---------------|

3 MONTHS

03/21/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/21/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/540,883 | Applicant(s) OTSUKA ET AL. | |
| | Examiner Shay L. Karls | Art Unit 1744 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>6/27/05, 9/28/05, 3/5/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered. On page 5, line 27 the applicant makes reference to JP-A-7-184815 however this application has not been submitted on an IDS. The US equivalent of JP-A-7-184815 is being included on the PTO-892.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the head of the cleaning tool" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the bottom of the head" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (USPN 6047435).

Suzuki teaches a cleaning sheet (1) adapted to be attached to the head (12) of a cleaning tool. There is a wiping portion adapted to be disposed on the bottom of the head. The cleaning sheet has a projecting part (3) that is adapted to stick out of the edge of the head by a projecting length M when attached to the head (figure 2, M is equal to the distance from seam 2 to outermost portion of the projection 3). Figure 3 shows the cleaning sheet being attached to the head with the projecting part extending beyond the head. The cleaning sheet comprises a base sheet (figure 1, top layer) and a wiping sheet (figure 1, lower layer) disposed on a surface of the base sheet. The projecting parts are fringe and are extending from the wiping sheet.

Suzuki teaches all the essential elements of the claimed invention however fails to teach that the projecting part has a repulsive force of 0.1 to 100 N/cm when formed by a length M/3 in

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the direction opposite the projecting direction thereof. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Suzuki so that the projecting parts have a repulsive force within the claimed range since the wiping ability depends on the variation of repulsive forces. Therefore, one of skill in the art would by routine experimentation find the optimum repulsive force for the projecting parts in order to optimize wiping efficiency.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Policicchio (USPN 6996871).

Policicchio teaches a cleaning sheet (400) adapted to be attached to the head (22) of a cleaning tool. There is a wiping portion adapted to be disposed on the bottom of the head. The cleaning sheet has a projecting part (411, 413) that is adapted to stick out of the edge of the head by a projecting length M when attached to the head (figure 12, M is equal to the length of the elements 411 and 413). The cleaning sheet comprises a base sheet (403) and a wiping sheet (401) disposed on a surface of the base sheet. The projecting parts are fringe and are extending from the wiping sheet.

Policicchio teaches all the essential elements of the claimed invention however fails to teach that the projecting part has a repulsive force of 0.1 to 100 N/cm when formed by a length $M/3$ in the direction opposite the projecting direction thereof. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Policicchio so that the projecting parts have a repulsive force within the claimed range since the wiping ability depends on the variation of repulsive forces. Therefore, one of skill in the art would by routine

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experimentation find the optimum repulsive force for the projecting parts in order to optimize wiping efficiency.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Reference JP 3027381.

JP '381 teaches a cleaning sheet (1) adapted to be attached to the head (5) of a cleaning tool. There is a wiping portion adapted to be disposed on the bottom of the head. The cleaning sheet has a projecting part (2) that is adapted to stick out of the edge of the head by a projecting length M when attached to the head (figure 1, M is equal to the length of the elements 2).

JP '381 teaches all the essential elements of the claimed invention however fails to teach that the projecting part has a repulsive force of 0.1 to 100 N/cm when formed by a length M/3 in the direction opposite the projecting direction thereof. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify JP '381 so that the projecting parts have a repulsive force within the claimed range since the wiping ability depends on the variation of repulsive forces. Therefore, one of skill in the art would by routine experimentation find the optimum repulsive force for the projecting parts in order to optimize wiping efficiency.

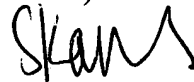
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Karls whose telephone number is 571-272-1268. The examiner can normally be reached on 7:00-4:30 M-Th, alternating F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Shay L Karls
Patent Examiner
Art Unit 1744